

♀ . Wau, 1. 4. 08.

♀ . „ „

♀ . „ „

*PTILOPACHYS FUSCUS* (Vieill.).

♂ . Raffle, 10. 2. 08.

♀ . Kojali, 20. 2. 08.

*PTEROCLES QUADRICINCTUS* Temm.

♀ . Raffle, 18. 2. 08.

*SARCIOPHORUS TECTUS* (Bodd.).

♂ . Tawela, 18. 12. 07.

*XIPHIDIPTERUS ALBICEPS* (Gould).

♀ . Kojali, 1. 3. 08.

♀ . „ 22. 2. 08.

*HOPLOPTERUS SPINOSUS* (Linn.).

♀ . Shambe, 29. 12. 07.

*TRINGOIDES HYPOLEUCUS* (Linn.).

♂ . Shambe, 29. 12. 07.

*ÆDICNEMUS SENEGALENSIS* Swains.

♀ . Raffle, 17. 2. 08.

*ÆDICNEMUS AFFINIS* Rüpp.

♀ . Wau, 24. 4. 08.

III.—*On the Birds of Kohat and Kurram, Northern India.*

By Lieut. C. H. T. WHITEHEAD, Indian Army. *With an Introduction by Major H. A. F. MAGRATH, Indian Army.*

(Plate III. and Text-figures 4 & 5.)

I.—INTRODUCTION.

By Major H. A. F. MAGRATH.

CONTRASTED with a district of the Punjab, which I had just left, the variety of the surrounding bird-life was one of the first impressions received on my arrival at Kohat in

December 1904, and it struck me that, as I was likely to be quartered there for some time, a List of the birds of the district might be usefully attempted. I had already made notes on a few of the commoner species, when I had the good fortune to discover in Mr. C. H. T. Whitehead, 56th Rifles, who had just rejoined his regiment at Kohat, a keen naturalist, anxious to start work at once on the ornithology of the district. We at once agreed to work together, and in spite of military duties which permitted of little leisure for the pursuit of hobbies, we had, by the end of February 1906, acquired at first hand a fair working knowledge of the local avifauna. In March 1906 my regiment moved to the Samana, a ridge 6500 feet above sea-level and 30 miles due west of Kohat Station. This ridge forms the northern boundary of the Miranzai Valley, and overlooks on the north the Khanki Valley and Tirah, the land of the Afridis. Here a few interesting additions were made to our list—such as *Pica rustica*, *Accentor rufilatus*, *Accentor himalayanus*, *Fringilla sordida*, and *Suya criniger*. Meanwhile, Whitehead was doing good work below, and during the manœuvres secured, among other birds, an example of *Fringilla cœlebs*, a species new to India. In the end of April 1906 I proceeded home on furlough and, as the sequel will shew, the production of the List was then left entirely in Whitehead's hands. An interesting discovery made by him shortly after my departure was a nesting colony of *Aëdon familiaris* in the vicinity of the station. Taking two months' leave in June 1906, he paid a visit to the Kurram Valley lying to the N.W. of Kohat, and followed to their breeding-grounds at the head of the valley many of the birds that winter in the plains around Kohat. During these two months he explored the Safed Koh Range very thoroughly, considering the short time at his disposal, ascending the two peaks of Sikaram (15,600 ft.) and Bodin (14,000 ft.), and by dint of real hard work, aided by much enthusiasm, added a great deal to our knowledge of the distribution and nesting-habits of many Oriental and Palæarctic species, discovering for the first time the nests and getting the eggs of *Saxicola capistrata*

and *Phylloscopus subviridis*, besides obtaining some interesting mammals. His most important discovery, however, was a new race of *Anorthura* procured at 10,000 feet on the Safed Koh. To this bird he has very generously done me the honour of giving my name, an honour quite undeserved, which has made me insist on the trivial name of "Whitehead's Wren" for that species.

With the kind assistance of Dr. Bowdler Sharpe and Mr. Charles Chubb I was enabled to work out, at the British Museum, the skins procured by Whitehead on this trip, in addition to those previously collected in Kohat.

During my absence on leave my regiment had marched in course of relief to Bannu, the district which borders the Kohat District to the south. My official connexion with Kohat was therefore, much to my regret (especially as I could no longer pursue my ornithological studies there), severed. Passing through Kohat Station on my return from leave, Whitehead met me with the interesting news that he had a few days previously shot a Waxwing (*Ampelis garrulus*), another new bird for India.

In April 1907, availing myself of three months' privilege-leave and Whitehead at the same time obtaining a year's furlough, we decided to take a trip together to the Kurram Valley before he went home, in order to add, if possible, to the knowledge gained in the previous year. We met at Thall on the 15th of April and there awaited the sanction of the Political Agent of the Kurram Valley to our proposed expedition in the territory under his administration. The number of the smaller Passerine birds migrating up the valley at the time was very great, and we had plenty to interest us in this unusual leave-resort. The officer commanding the Post, Lieut. Wolley, with his wonted hospitality, invited us to consider ourselves honorary members of his little mess, which privilege we were only too glad to avail ourselves of. In due course the Political Officer's permit arrived, but it was so hampered by restrictions that we had to abandon our original intention of working slowly up the valley and proceed direct to Parachinar, the headquarters of the Agency,

which is situated about 13 miles from the head of the valley. Here the officers of the Kurram Militia very kindly allowed us to make use of their exceedingly comfortable mess, and most hospitably entertained us during our stay. After obtaining permission to move up to Peiwar, 10 miles further up the valley, we left Parachinar on the 21st of April. The Political Agent was so solicitous for our safety that he insisted on our taking an armed tribal escort of six men with us. We did not require their military assistance, but found them useful to look for nests, climb trees, and carry our guns and lunch-baskets. Making the little rest-house at Peiwar our headquarters, we daily explored the surrounding Ilex jungle and visited several times the pine-clad hills on the Afghan border. In an Ilex, Whitehead was fortunate in coming across a nest, with eggs, of *Ægithaliscus leucogenys*. This bird is an early breeder, and six other nests that we found contained young. We had not been at Peiwar many days when rumours reached us from Parachinar that the Turis (the tribe inhabiting the Valley), who had been listening to wondrous tales of the spread of plague in Peshawar, poured into their ears by Kabuli traders and others passing up the valley from India to Afghanistan, had become highly suspicious of our movements and credited us with all sorts of nefarious deeds. We were supposed to be agents of the Government sent up to poison their water-supply and to spread the plague. We were said to stalk abroad at night catching and inoculating rats, in order to disseminate the pestilence. Colour was lent to this ingenuous theory by the fact that we had trapped a few Mole-rats, Gerbilles, and Dormice. Curiously enough we could see no signs of hostility in the villagers themselves, in fact we found them invariably friendly, and our tribal escort seemed to know nothing of these rumours. We were now anxious to shift camp and to move up the slopes of Sikaram, as the snow, under the influence of the summer sun, was gradually receding. But, in face of the rumours related above, the Political Agent did not think it advisable for us to do so, and even considered that our presence at Peiwar might lead

to some act of violence towards us, and be the cause of administrative complications in the valley. We were, therefore, asked to return to Parachinar, where a meeting was called of the leading Maliks, on the result of which our fate with respect to being allowed to continue collecting would depend. Unfortunately and much to our chagrin the verdict of the "Jirga" was against us, and the Political Agent called on us and informed us that, owing to the popular excitement, it would be quite unsafe for us to go into camp

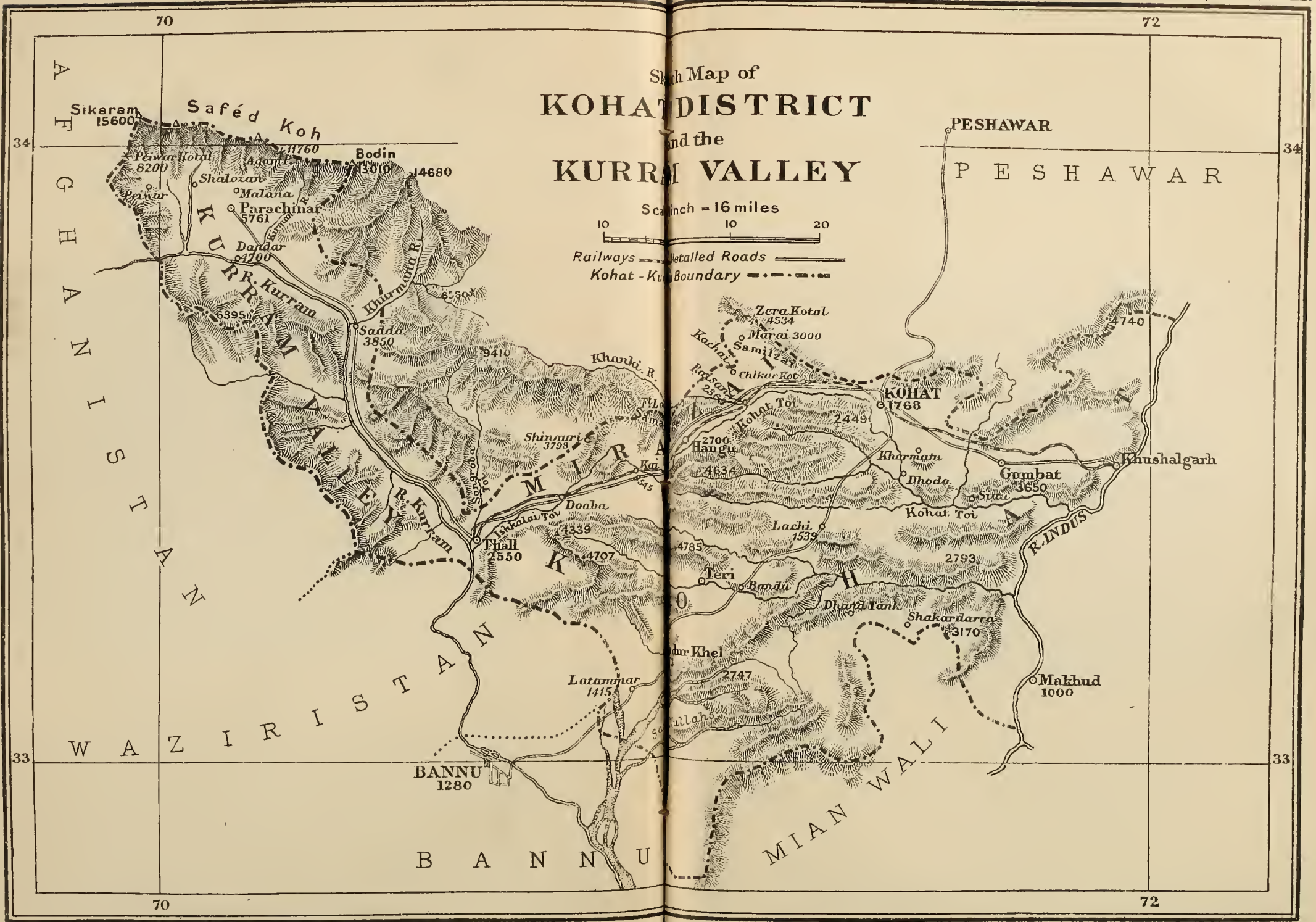
Text-fig. 4.



Fort Lockhart, in winter.

again and that we could only work in the immediate vicinity of Parachinar. Our expedition thus came to an untimely end, and, as there was nothing more to be done in the bird-line at Parachinar, we returned to Thall, whence a few days later Whitehead took his departure for England, and I to places where ignorance and superstition would cease from troubling.

I may mention that soon after we arrived in Parachinar from Peiwar news was brought in by a native officer of the



local militia, who had been on leave to his village, that we had left Peiwar just in time. Had we remained another night, we were, like the Babes in the Wood, to have been foully murdered. All arrangements had been made, assassins hired, and our pleasant little camp was to have been converted into a shambles! This was a most amusing yarn which tickled us immensely! Gladly would we have accepted these small risks if only we had been allowed to continue our expedition.

Text-fig. 5.



Zeran Nullah, Safed Koh, from 8000 ft. alt.

A glance at the accompanying map (Plate III.) will give a good idea of the geography of this portion of the N.W. Frontier of India. Situated between the 32nd and 35th parallels of latitude and the 69th and 72nd meridians of longitude it is in shape somewhat like a pipe, the District of Kohat forming the bowl and the Kurram Valley the stem and mouthpiece. Its northern boundary, proceeding from east to west, consists of the bare and rocky hills lying between it and the Peshawar District, the Samana Range

(barren hills inhabited by independent Orakzai and Afridi tribes) and the Safed-Koh Range. This rugged barrier of hills is on the east as low as 3000 feet above sea-level, but gradually increases in height westward till it culminates in the imposing snow-clad ramparts of the Safed-Koh Range, the highest peak of which, Sikaram (15,600 feet), lies at its western extremity. To the west it is bounded by Afghanistan and Waziristan, to the south by the districts of Bannu and Mianwali, and to the east by the R. Indus.

The general aspect of Kohat is a confused mass of low bare rocky hills, nullahs, and ravines, intersected by two main depressions running parallel and with a general trend from west to east. These depressions are formed, in the first case, by the Miranzai and Kohat Valleys running in prolongation of each other, and in the second by the Teri Valley. Two alluvial plains are also noticeable, namely that around and east of Kohat Station, and the oasis of Lachi. The Kurram is a long valley, averaging some 2 miles in width at its lower end and broadening into a stony plain 8 or 10 miles wide at its upper extremity and rising in the 70 miles from Thall 4000 feet. Down its centre rushes, over a bed of stones and boulders, the river that gives its name to the valley, which rises in Afghanistan some 20 miles beyond the valley-head. Consisting, as the district does, for the most part of desert, the flora, compared with that of the Himalayas, is not luxurious. Coarse grass, Olives, thorn-scrub, and Dwarf Palms sparsely cover the hills, and in parts of the Miranzai Valley and around Thall the two latter form thick scrub-jungle. Ilex-Oaks, where their branches are not ruthlessly lopped and the trees are permitted to grow, attain a considerable size on the Samana, and here and there on this hill some fine Ash-trees flourish. In the Safed Koh Range, however, forests of Fir, Pine, and Cedar clothe the mountain-sides from about 8000 to 12,000 feet, and cover the top of the spur over which the Peiwar Pass runs. Below, these forests are gradually replaced by Ilex trees, which again, as one descends to the low foot-hills, are replaced by dense Ilex-scrub.



Where water is easily brought on to the land, as is the case in the plains around Kohat and Lachi and in the Kurram, Hangu, and Teri Valleys, green oases of cultivation relieve the general barrenness. A feature of the cultivation around Kohat and in the Miranzai Valley consists of the beautiful orchards of Mulberry, Peach, Plum, Fig, and Vine which abound, and are supplemented, in the stonier parts, by groves of wild Olive-trees. The crops consist mainly of wheat; but Indian corn, barley, millet, cotton, and sugarcane are also grown, and around Bangu, Thall, and in the Kurram Valley, rice. Immediately south of the station of Kohat the Government grass-farm, of about 300 acres, possesses many attractions for birds on migration, and, after irrigation, is not a bad place to observe Waders: even Duck and Snipe have been shot on it. The climate is very dry. As regards temperature: in the plains of Kohat the winter might be compared to that of the south of France, but the summer is decidedly hotter and probably most nearly approximates to that of Egypt. In the Kurram Valley temperatures are much lower, and the climate of Upper Kurram must be somewhat similar, both in summer and in winter, to that of Northern Germany.

Ornithologically speaking, this corner of the Palæartic Region\* has hitherto been little worked. With the exception

\* Dresser in the preface to his 'Manual of Palæartic Birds' does not clearly define the Palæartic boundary in this locality, and by omitting all reference to the plains of India would seem to imply that Kohat belongs to the Indian Subregion. On the other hand, Blanford in his 'Distribution of Vertebrate Animals in India' assigns the plains of the Punjab to the Palæartic Region. Professor Newton, however, in his article on "Birds" in the 'Encyclopædia Britannica,' remarks that if Baluchistan is to be excluded from the Palæartic Region, "then the line of demarcation must run inland and so continue between that land and Afghanistan *till* ascending the right bank of the Indus it turns the shoulder of the Great Snowy range." The italics are mine, and I take this to mean that the line of demarcation strikes the Indus at a point in prolongation eastward of the boundary-line between Afghanistan and Baluchistan, *i. e.* somewhere in the vicinity of Dera Ghazi Khan. If this is the correct interpretation of Newton's views then the ornithology of N.W. India strongly supports them.

of the two papers by Colonel R. H. Rattray published in the 'Journal' of the Bombay Natural History Society, "Notes on Nests taken from March to June at Kohat and Mussoorie, North-Western Provinces" (vol. x. p. 628), and "Birds Collected and Observed at Thall" (vol. xii. p. 337), and a few observations by Major Wardlaw-Ramsay and others mentioned in the 'Fauna of British India,' I know of no contribution to its ornithology\*. Neither Hume nor Jerdon, Oates nor Blanford, nor others of India's many excellent ornithologists, appear to have visited it. And yet it is an important locality, lying as it does in the extreme north-west of the Peninsula on one of the great migration-highways into India, and at a point on that highway where it converges to its narrowest limits. The pre-eminently Palearctic character of the avifauna is most striking. Especially is this noticeable in the forms breeding in the Upper Kurram, very few of the many subtropical species inhabiting the Western Himalayas being found there. From the description of the country and from its geographical position the predominance of such groups as the Accipitrines, Motacillidæ, Fringillinæ, Emberizinae, and of the desert-forms will not be considered surprising. Although undoubtedly well represented on migration, the Ducks, Waders, and Shore-birds are difficult of observation in Kohat. With the exception of the grass-farm, the tank at Dhand-Idl-Khel, and some marshy tracts round Thall and Lachi, this District is singularly devoid of the moist places beloved of Wild-fowl and Waders, no streams of any size flowing through it. Matters improve in this respect on arriving at the Kurram Valley. The river here being taken off for rice-cultivation in places along its banks, marshy spots have formed, and in the months of March and April, September and October, numbers of Wild-fowl and Waders, using this

\* There is only one allusion to Kohat itself in the 'Fauna of British India,' and that is in connection with the occurrence there of the Red-wing (*Turdus iliacus*), recorded by Jerdon on hearsay from Blyth, on hearsay from Trotter. After more than two years' careful observation we failed to come across this bird, and I think we may safely say that it is not "a regular winter visitant," if it occurs at all.

river-route on migration, are induced to halt on their way, affording good sport to "Sahibs" and Turi villagers. The importance of this river as a migration-route is illustrated lower down, where it debouches into the sandy plains of Bannu, outside of the area which we are now considering. Here vast quantities of Wild-fowl, Waders, and Gulls, on migration to their far-off northern homes from the lower reaches of the Indus and the Manchar Lake in Sind, are to be observed, in the months of February and March, asleep or preening their feathers on the mudbanks in mid-river. The majority of these birds undoubtedly keep to the river-route, there being no other important water-way lying near their line of migration, and must therefore, of necessity, pass up the Kurram Valley. It may be wondered at that the River Indus, bordering Kohat, has not been mentioned as suited to the observation of Water-fowl. But in this portion of its course that great river is confined between hills, and flows over a rocky bed, consequently here it affords no feeding-grounds or resting-places for such birds. Whitehead came down it in a boat at a time of year when he might have expected to find birds, but his journey proved disappointing. On the whole, then, Kohat and Kurram must be looked on as a profitable locality to the Indian ornithologist.

The straggling of Western Palæarctic forms, not as yet recorded within Indian limits, into this area is probably of commoner occurrence than might be supposed, and, were it possible for a winter to be spent in collecting in the Upper Kurram, yet new species to the Indian list would doubtless be forthcoming. The task we set ourselves in our late trip, so unfortunately interrupted, still remains to be done, and most assuredly new breeding species to India await the discoverer.

It was at first intended to publish two separate papers, one on the birds of Kohat and another on those of the Kurram Valley, but Mr. Whitehead has decided, wisely as I think, to combine them. The two localities are contiguous, and the latter is, as I mentioned before, the breeding-ground

of many species that winter in the plains. Of the total number of 336 species which the list contains, 317 were found in Kohat, the remaining 19 were met with only in the Kurram Valley. Considered together, therefore, the single paper will be found to be of greater scientific value than if the two districts had been separately treated, and Mr. Whitehead deserves much credit for the excellent piece of work which he has accomplished.

## II.—PREFACE.

By C. H. T. WHITEHEAD.

Major Magrath does not take any credit for his own work. Before I even started he had made a fair list of the birds of Kohat, and it was his enthusiasm that infected me. All that I have done is to somewhat amplify this list and add a little to the notes. The paper should have been written by him, but he insisted on my doing so, and has now most kindly gone carefully through it, making many necessary corrections and alterations and entirely rewriting the account of the Bulbuls of the genus *Molpastes*, the hybrid forms of which he was first to observe in Kohat.

Much interesting information was kindly contributed by Mr. D. Donald, C.I.E., the Political Officer and Commandant of the Border Military Police and Samana Rifles, which his long residence in Kohat (some 18 years), his frequent tours in the district, the interest he takes in birds generally, and in the Accipitrines in particular, and his great reputation as a falconer, render of especial value.

Specimens of most of the Passerine and of a large number of the remaining birds included in this paper were shot and carefully compared with Oates and Blanford's excellent descriptions, measurements and points of difference, if any, being always recorded, but only in the case of their not corresponding or of their being of special interest were skins made, for time did not permit of more. These skins are now in the British Museum and are those referred to in the paper. Amongst them will be found melanistic varieties of several species (*Lanius lahtora*, *Passer domesticus*, *Anthus similis*,

*A. spipoletta*), which, except in the case of the Shrike, were shot out of flocks of similarly coloured birds. Taken as a whole, however, the birds of the District are characterized by their pale colouring, which is what one would expect from the desert nature of the country.

Many more birds appear to halt in Kohat in the spring migration, which continues from February till well into June, than in the autumn. This is probably due to the configuration of the locality. As will be seen from the map (Plate III.), the main Kohat Valley at its junction with the Indus is comparatively broad but narrows considerably towards the Kurram River, with which it is connected by the Ishkalai, an insignificant stream flowing in at Thall. The latter stream is probably easily missed by the hosts of migrants passing down the Kurram River on southward migration in autumn. Major Magrath writes that they migrate down this river in the Bannu District in great numbers in August, September, and the first half of October.

In square brackets are added notes on those species met with by Major Magrath in Bannu, but not found by us in Kohat or in the Kurram Valley, as most of them would be likely to occur within our limits. The Bannu District, however, exhibits a great contrast to Kohat, consisting as it does for the most part of a broad, well-watered, highly cultivated plain with a good deal of marsh-land.

In the following notes, wherever the expression "we" is used it refers, of course, to Major Magrath and myself, as we worked together.

The word "plains" is used, as it usually is in India, to denote the low country—*i. e.*, in this case, below about 3000 feet—as opposed to the main hill-ranges, and not merely the flat country, the greater part of Kohat being a maze of low hills and ravines. Similarly the word "desert" is used in its wider sense to include stony and not necessarily level wastes which cover such a large part of the District (where there is very little sandy desert).

The nomenclature followed is that adopted by Oates and Blanford in the 'Fauna of British India, Birds,' and the

numbers placed in brackets before the scientific names are those used in that work.

The following is a list of the papers chiefly referred to, all contributed to the 'Journal of the Bombay Natural History Society':—

- RATTRAY, Colonel R. H.—Birds Collected and Observed at Thall. xii. pp. 337 to 348 (1899).  
 MARSHALL, Capt. T. E.—Notes on the Birds near Quetta: Part I. xiv. pp. 601 to 602 (1902); Part II. xv. pp. 44 to 64 (1903).  
 FULTON, Capt. H. T., D.S.O.—Notes on the Birds of Chitrál. xvi. pp. 44 to 64 and p. 744 (1904).  
 RATTRAY, Colonel R. H.—Birds'-nesting in the Murree Hills and Galis. xvi. pp. 421 to 428 and pp. 657 to 663 (1905).  
 CUMMING, J. W. N.—Birds of Seistan. xvi. pp. 686 to 699 (1905).  
 WARD, Colonel A. E.—Birds of the Provinces of Kashmir and Jammu and Adjacent Districts. xvii. pp. 108 to 113, pp. 479 to 485 (1906), pp. 726 to 729, pp. 943 to 949 (1907); xviii. pp. 461 to 464 (1908).

To obviate the inconvenience of looking up these papers I have added references, and where possible the gist of the note.

My best thanks are due to Dr. Bowdler Sharpe and Mr. Charles Chubb for much assistance in the identification of my skins, and to the former for very kindly going through my notes and putting them into correct form in spite of a great press of other work. Also to Dr. Hartert for going through the series of Wagtail- and Pipit-skins. Lastly, to Dr. Sclater, F.R.S., for most kindly looking through the proofs and seeing the paper through the press.

### III.—LIST OF BIRDS AND REMARKS.

By Lieut. C. H. T. WHITEHEAD.

#### [1.] CORVUS CORAX. The Raven.

Rattray, J. B. N. H. S. xii. p. 337 (common round Thall); Marshall, op. cit. xiv. p. 681 (the small race very common and resident at Quetta); Cumming, op. cit. xvi. p. 686 (race in Seistan); Ward, op. cit. xvii. p. 108.

Ravens of all sizes are very common in the cold weather, especially round human habitations, the majority leaving in

April or early in May, but I have counted over 80 roosting together as late as the 18th of May near Kohat.

A few, however, mostly smaller birds, are resident all the year round.

[3.] *CORVUS CORONE*. The Carrion-Crow.

Cumming, J. B. N. H. S. xvi. p. 686 (common in winter in Seistan, and often seen about houses); Ward, op. cit. xvii. p. 108 (resident in Kashmir, nesting between 8000 and 10,000 ft.).

505. ♂ ad. Kurram Valley, 5800 ft., 19th April.

I am not sure whether this species occurs in the plains or not. Major Magrath has found it fairly common in winter in Bannu, so it probably does. In the Upper Kurram Valley it nests freely in April from 5000 ft. upwards, a Chinar (Plane-tree) near a village being usually selected as a nesting-site. Like the Raven, the Carrion-Crow is not a dweller in the wilds in these parts, but prefers the neighbourhood of mankind.

[4.] *CORVUS MACRORHYNCHUS*. The Jungle-Crow.

Rattray, J. B. N. H. S. xii. p. 337 (Thall: very common); Fulton, op. cit. xvi. p. 45 (Lower Chitral: very common); Rattray, t. c. p. 421 (very common up to 9000 ft.: Murree Hills); Ward, op. cit. xvii. p. 108.

Abundant in the plains from November till mid-April (last seen on the 28th), partially taking the place of *C. splendens*. In summer it retires to the Ilex- and Fir-clad slopes of the higher ranges, nesting freely on the Safed Koh.

[5.] *CORVUS FRUGILEGUS*. The Rook.

Marshall, J. B. N. H. S. xiv. p. 601 (once seen in January near Quetta); Cumming, op. cit. xvi. p. 686 (common in Seistan in winter); Ward, op. cit. xvii. p. 108 (occurs in winter along the R. Jhelum).

641. ♂ juv. Samana, 6500 ft., 5th March.

744, 745. ♀; 746. ♂ juv. Kohat, 1760 ft., 25th March.

Visits the district in large flocks in winter, arriving in November and remaining as late as the middle of April.

The birds, however, staying on through March appear to be almost all young which have not entirely shed the face-feathers and nasal bristles. Oates, in the 'Fauna of India,' writes: "About January or when the young bird is about nine months old the nasal bristles are cast, and by March the front part of the head has become entirely denuded of feathers." Here, neither are entirely lost till April. The above-mentioned examples represent the ordinary type found here in March.

[6.] *CORVUS SHARPII*. Sharpe's Hooded Crow.

*Corvus sharpii* Oates, F. B. I., Birds, i. p. 20; Cumming, J. B. N. H. S. xvi. p. 686 (common in Tamarisk-jungle of Seistan); Ward, op. cit. xvii. p. 109 (a rare visitor to Kashmir).

We have not observed the Hoodie in Kohat, but Mr. Donald, the Political Officer, tells me that he has met with one or two almost every year, generally about the grass-farm. This Crow is a common winter visitor to the Peshawar and Bannu Districts, which are better suited to its habits. From the latter Major Magrath has sent a typical specimen of the race *Corvus cornix sharpii* to the British Museum.

[7.] *CORVUS SPLENDENS*. The House-Crow.

Ratray, J. B. N. H. S. xii. p. 337 (not common at Thall); Ward, op. cit. xvii. p. 109 (common in the low country).

A resident and extremely common in summer. In mild winters numbers remain, but in severe weather it almost entirely disappears, *C. macrorhynchus* taking its place as the common cook-house scavenger.

[9.] *CORVUS MONEDULA*. The Jackdaw.

Ratray, J. B. N. H. S. xii. p. 387 (rare in Thall); Ward, op. cit. xvii. p. 109.

A rather rare winter visitor from December till March, occurring with large flocks of Rooks. Major Magrath noted immense flocks coming into the station on five consecutive evenings, just before the cold wave in January



1905. Similar flocks, but mixed with Rooks, roosted in cantonments for a few nights in February 1908.

[10.] *PICA RUSTICA*. The Magpie.

Marshall, J. B. N. H. S. xiv. p. 601 (common round Quetta); Fulton, op. cit. xvi. p. 46 (very common in Upper Chitral); Cumming, t. c. p. 686 (scarce in Seistan: 1700 ft.); Ward, op. cit. xvii. p. 109 (common in Ladak and Baltistan).

661. Marai, 2900 ft., 9th March.

773. ♀ ad. Raisan, 2400 ft., 1st April.

A resident, but somewhat rare in Kohat, being more often seen in Samilzai than elsewhere; a few pairs also occur on the Samana, where Major Magrath found a nest in April built in an *Ilex*, just above the tennis-court. In the Upper Kurram Valley it is very common, especially near Peiwar, and occurs up to the tree-limits. The nest is usually placed in an *Ilex*, and is of the normal type, though often within six or seven feet of the ground. These examples appear to be typical *P. rustica*.

[16.] *DENDROCITTA RUFA*. The Indian Tree-Pie.

Ratray, J. B. N. H. S. xii. p. 337 (Thall: a few seen); Ward, op. cit. xvii. p. 109.

670. ♂ ad. Raisan, 2300 ft., 12th March.

709. ♂ ad. Kohat, 1760 ft., 19th March.

A common winter visitor to Kohat, arriving early in September and leaving about mid-April. A few pairs, however, remain to nest, Mr. Donald, the Political Officer, having several times observed young birds in July in the Miranzai Valley barely able to fly.

[24.] *GARRULUS LANCEOLATUS*. The Black-throated Jay.

Ratray, J. B. N. H. S. xii. p. 337 (Thall: common on the hills); Fulton, op. cit. xvi. p. 46 (Lower Chitral: very common from 5000 to 10,000 ft.); Ratray, t. c. p. 421 (very common round Murree); Ward, op. cit. xvii. p. 109.

Rare in the plains. During the cold spell in November and December, 1905, a few individuals occurred about the

grass-farms and the orchards of Kohat. A resident on the Samana Range above 5000 ft., but not common.

Fairly plentiful in the Ilex-scrub in the Kurram Valley, occurring up to 8000 ft. Generally goes about in parties of four or five, out of the breeding-season, but sometimes collects into big flocks. Major Magrath observed one of about forty individuals near Peiwar (7000 ft.) in April 1907. Very shy and difficult to observe.

[28.] *NUCIFRAGA MULTIPUNCTATA*. The Larger-spotted Nutcracker.

Fulton, J. B. N. H. S. xvi. p. 46 (only got one specimen, no others seen); Ward, op. cit. xvii. p. 109, xviii. p. 461 (common: young hatch out in April; probably two broods).

Occurs sparingly amongst the conifers of the Safed Koh, but is more often heard than seen. Its cry resembles the syllables "*käck-käck*" rapidly repeated, hence its Pushtu name "*Khäkärä*."

[30.] *PYRRHOCORAX ALPINUS*. The Yellow-billed Chough.

Marshall, J. B. N. H. S. xiv. p. 605 (10,000 ft., near Quetta); Fulton, op. cit. xvi. p. 46 (Chitral: very common from 5000 ft. to 16,000 ft., according to season); Ward, op. cit. xvii. p. 109 (occurs from 5500 ft. in winter upwards, often caught in traps set round carrion for foxes).

Not common, but fairly well distributed in summer along the upper slopes of the Safed Koh above tree-limit. By the end of June the birds had collected into small flocks.

[31.] *PARUS ATRICEPS*. The Indian Grey Tit.

Marshall, J. B. N. H. S. xiv. p. 601 (winter visitor to Quetta: seen at Ziarat, 8000 ft., in May); Fulton, op. cit. xvi. p. 46 (Chitral: very common); Rattray, t. c. p. 421 (very common up to 6500 ft.: Murree); Ward, op. cit. xvii. p. 109.

327. ♂ juv. Safed Koh, 7500 ft., 16th July.

A very common winter visitor to the District from mid-September till about the third week in April. A resident on the Samana above 5000 ft. Nests in the Ilex-scrub of the Upper Kurram in fair numbers.

ANTHOSCOPIUS CORONATUS. The Turkestan Penduline Tit. Hartert, Pal. Vögel, i. p. 392.

Lachi, 1500 ft., 25th March; ♂ ♀ ad., Kohat, 1760 ft., 7th-8th April; ♂ ad., Kohat, 1760 ft., 18th March.

Major Magrath first observed a party of these Tits on a Peach-tree in his garden in April 1905. Since then we have met with the bird regularly from mid-March till mid-April in parties of from two or three to forty or more, chiefly frequenting Shisham trees, but also orchards and Camel-thorn scrub. The call-note resembles that of *Zosterops palpebrosa* and is constantly uttered.

Mr. T. R. Bell, I.F.S., was the first to discover this species in India. He met with parties of it in February 1904 in the tamarisk-acacia scrub-jungle near Sukkur, Sind, and procured several examples (*vide* J. B. N. H. S. xvii. p. 244).

[37.] ÆGITHALISCUS LEUCOGENYS. The White-checked Tit.

Fulton, J. B. N. H. S. xvi. p. 46 (resident and very common from 6000 to 12,000 ft. in Lower Chitral); Ward, *op. cit.* xvii. p. 109.

333. ♂ ad. Safed Koh, 1800 ft., 20th July.

391. ♀ ad. Samana, 5000 ft., 5th November.

A resident in the Upper Kurram Valley and on the Samana, being largely reinforced on the latter in winter: some individuals descending to the Miranzai and Samilzai Valleys down to 2500 ft., where I have met with parties as late as the 9th of April.

Breeds freely in the Ilex-scrub near Peiwar from 6000 to 8000 ft. Nesting-operations must commence towards the end of March, as a nest found on the 1st of May contained fully fledged young. The fabric is usually placed near the top of an Ilex-bush from three to seven feet above the ground. It is egg-shaped and rather like that of the British Long-tailed Tit, but a good deal smaller and not quite so neat. It is made of moss and cobwebs outside, lined with a little grass, with a thick inner lining of feathers. The opening is

usually near the top, but is sometimes nearer the centre. We came across seven nests altogether, the first six containing young, and the seventh a nearly fresh clutch of five eggs. These are pure white, three having a very faint zone of spots round the large end, the remainder being unmarked, and averaging  $\cdot 58'' \times \cdot 39''$ . The clutch appears to vary from five to eight. The young closely resemble their parents, but the colours are duller, and the black of the chin and throat is replaced by a few indistinct dusky streaks.

Capt. Keen also observed a pair of these Tits with a newly fledged family on the Samana.

In habits this species closely resembles the Long-tailed Tit, going about in parties of eight or nine in scrub-jungle, continually uttering its call-note, which may be rendered by the syllables "prit-t-t," while it is often in company with *Parus atriceps*.

[44.] *LOPHOPHANES MELANOLOPHUS*. The Crested Black Tit.

Fulton, J. B. N. H. S. xvi. p. 46 (abundant in Chitral from 5000 to 12,000 ft.); Rattray, t. c. p. 422 (common in the Murree Hills); Ward, op. cit. xvii. p. 110 (common in Kashmir).

Very common on the Safed Koh from 6500 ft. to tree-limit. An early breeder. Major Magrath found a nest containing young on the 25th of April. It has a great variety of notes.

[91.] *TROCHALOPTERUM SIMILE*. The Western Variegated Laughing-Thrush.

Fulton, J. B. N. H. S. xvi. p. 47 (resident and very common up to 6000 ft. in Lower Chitral); Rattray, t. c. p. 422 (very common round Murree, up to 10,000 ft.); Ward, op. cit. xvii. p. 422.

417. Ad. Samana, 5600 ft., 19th December.

A resident, but rare. Altogether I met with about a dozen individuals in one wooded nullah on the northern slope of the Samana, but nowhere else. It is a great skulker; its loud whistling notes, however, proclaim its presence.

Usually found creeping about the densest part of the undergrowth.

[99.] *TROCHALOPTERUM LINEATUM*. The Himalayan Streaked Laughing-Thrush.

Ratray, J. B. N. H. S. xii. p. 337 (common in winter : Thall); Marshall, op. cit. xiv. p. 602 (common at 4000 ft. in February : Quetta); Fulton, op. cit. xvi. p. 47 (abundant in Chitral); Ratray, t. c. p. 422 (commonest bird in Murree Hills); Ward, op. cit. xvii. p. 110.

130. ♂ ad. Marai, 3000 ft., 25th February.

579. Sex? Kohat, 1760 ft., 13th February.

633. ♀ ad. ,, ,, 1st March.

653. ♀ ad. Hangu, 2700 ft., 8th March.

Abundant and resident on the Samana, many birds wintering in the Miranzai and Samilzai Valleys, and, in the winter of 1907/1908, quite a number visited the orchards around Kohat, staying till April. Occurs also in the Kurram Valley up to 7000 ft., but not so commonly.

[105.] *ARGYA CAUDATA*. The Common Babbler.

Ratray, J. B. N. H. S. xii. p. 337 (abundant at Thall); Cumming, op. cit. xvi. p. 686 (very common in Seistan); Ward, op. cit. xvii. p. 110 (found in the outer ranges).

A resident and very common, especially in scrub-jungle, only occasionally visiting gardens. Does not ascend the hills to any height, its place being taken by the next species.

Breeds in April and May.

[104.] *ARGYA EARLII*. The Striated Babbler.

Major Magrath obtained an example of this species last March in a reed-bed in Bannu.

[110.] *CRATEROPUS CANORUS*. The Jungle-Babbler.

Ward, op. cit. xvii. p. 110 (chiefly confined to Jammu).

639. ♂ ad. Hangu, 2700 ft., 3rd March.

666. ♂ ad. Marai, 3000 ft., 10th March.

A resident, taking the place of the last species from the foot of the hills, where the two occur together, up to 4000 feet in winter and 6000 feet in summer. Fairly

common, too, in the Miranzai Valley in winter, wherever there is plenty of scrub-jungle. Not observed in the Kurram Valley.

[139.] *PYCTORHIS SINENSIS*. The Yellow-eyed Babbler.

Major Magrath has met with parties of this Babbler in the sugar-cane fields and reed-beds of Bannu. An example shot by him is now in the National Collection.

[187.] *MYIOPHONEUS TEMMINCKI*. The Himalayan Whistling-Thrush.

Ratray, J. B. N. H. S. xii. p. 338 (common in winter: Thall); Marshall, *op. cit.* xiv. p. 602 (Quetta: 7000 ft. in May); Fulton, *op. cit.* xvi. p. 47 (common in Lower Chitral); Ratray, *t. c.* p. 422 (common in Murree Hills); Ward, *op. cit.* xvii. p. 110.

A fairly common winter visitor from mid-September till mid-April, rather rare round Kohat, but common in the Miranzai and Samilzai Valleys and on the Samana. A resident in the Kurram Valley, nesting between 6000 and 8000 feet. Usually found about cliffs and groves near water, but sometimes in very dry shadeless spots some distance from water.

[191.] *LARVIVORA BRUNNEA*. The Indian Blue-Chat.

Ratray, J. B. N. H. S. xvi. p. 423 (common at Murree); Ward, *op. cit.* xvii. p. 110 (nests in Kashmir up to 8000 ft.).

Occurs in summer along the lower slopes of the Safed Koh between 6500 and 8000 ft., but is not common except in one or two secluded glens. Very shy, has a rich but quite short song.

[226.] *ZOSTEROPS PALPEBROSA*. The Indian White-eye.

774. ♂ ad. Kachai, 2700 ft., 1st April.

A cold-weather visitor to the District, the first parties arriving in August, but it does not become common till October, and leaves toward the middle of April. Possibly a resident on the Samana: a party of eight or nine stayed there during the winter of 1906-07, in spite of frequent

heavy snow-storms ; a large number arrived early in April, though whether only on migration or not I cannot say, as I left shortly afterwards. Not observed in the Kurram Valley.

[269.] *HYPSSIPETES PSAROIDES*. The Himalayan Black Bulbul.

Fulton, J. B. N. H. S. xvi. p. 47 (common in summer) ; Rattray, t. c. p. 424 (common round Murree) ; Ward, op. cit. xvii. p. 111 (common in Kashmir).

583. ♀ ad. Kohat, 1760 ft., 15th February.

630. ♂ ad. „ „ 1st March.

In 1907 several parties of this species visited the district early in February, staying till the end of March. They were always to be found about the same spot, never wandering far away. Berries of the Bakain tree seemed to form their staple food.

[283.] *MOLPASTES INTERMEDIUS*. The Punjab Red-vented Bulbul.

Ward, J. B. N. H. S. xvii. p. 111 (found in Poonch and Jammu).

634. ♀ ad. Kohat, 1700 ft., 1st March.

733. ♂ ad. „ „ 23rd March.

786. ♂ ad. „ „ 4th April.

A resident and not uncommon in the gardens and orchards around Kohat, though seldom seen elsewhere in the District. This species, as Major Magrath has pointed out, probably interbreeds with *M. leucogenys*, as they are so often seen together, and birds intermediate in colouring are so common (*vide* next note). Mr. Donald, the Political Officer, states that on two separate occasions he has met with the present species in Kohat paired with a yellow-vented Bulbul and *at the same nest*. Further, that it is well known amongst local gardeners that the red- and yellow-vented Bubluls do interbreed, their progeny being known as “Neemchi,” *i. e.* half-breeds. *M. intermedius* is the common resident Bulbul of the Peshawur district north of Kohat.

List of hybrids between *M. intermedius* and *M. leucogenys*.

			Ear-coverts	Under tail-coverts
590.	♂ ad.	Kohat, 1760 ft., 16th Feb.	dingy white.	yellow.
564.	Ad.	" " 6th "	"	orange.
631.	♀ ad.	" " 1st Mar.	dark brown.	red.
635.	♀ ad.	" " 2nd "	"	pale buff.
689.	♀ ad.	" " 16th "	dirty white.	yellow with orange tips.
700.	♂ ad.	" " 17th "	white.	orange.
710.	♀ ad.	" " 19th "	dark brown.	dull crimson.
735.	♀ ad.	" " 24th "	"	"
758.	♂ ?	" " 28th "	dusky white.	orange.
785.	♀ ad.	" " 4th Apr.	dull white.	lemon-yellow.
790.	♂ ad.	" " 5th "	"	brownish orange.
791.	♂ ad.	" " 5th "	"	orange-yellow.

(A truly wonderful series, but the birds *must* be hybrids.—*R. B. S.*)

[These remarks are by Dr. Sharpe, and from them it will be seen that the series ranges from an almost pure *M. intermedius* to a nearly pure *M. leucogenys*. No two examples are alike, some being more like "*intermedius*," others more like "*leucogenys*" or "*leucotis*."] ]

[284.] MOLPASTES LEUCOGENYS. The White - checked Bulbul.

Fulton, J. B. N. H. S. xvi. p. 47 (Chitral: summer visitor from March to October; very common up to 7000 feet); Ward, op. cit. xvii. p. 111 (very common in Kashmir).

591.	♂ ad.	Kohat, 1760 ft., 16th Feb.	} Very grey on the breast, but with pale yellow under tail-coverts.
724.	♂ ad.	" " 21st Mar.	
767.	♀ ad.	" " 31st "	More typical.
779.	♂ ad.	" " 2nd Apr.	" "
780.	Ad.	" " "	" "
789.	♀ ad.	" " 5th Apr.	" "
792.	♂ ad.	" " "	" "



[I do not call these birds true *P. leucogenys*, as they are so much darker on the head, which is nearly blackish, and have not the olive on the back. They illustrate how variable is the coloration of this species in Kohat. In spite of its abundance it is difficult to procure an example true to type. Most of the birds seen have the breast mottled, *i. e.* instead of having the black of the upper breast clearly defined from the light colour of the lower parts, it graduates into it, frequently combined with a mottled back and sullied cheek-patches and a blackish head with or without a supercilium.

Major Magrath, who has specially studied the Bulbuls in Bannu, kindly contributes the following note on the present species :—

“Dr. Bowdler Sharpe is, I believe, inclined to the view that this Bulbul differs generically from *Molpastes*. With this I can hardly agree. Seen in its natural state, the bird is a true *Molpastes*. In habits and notes it differs little from the next species, with which it mixes freely, and from which it is anything but easy to distinguish when in a tree. It seems likely that the two species interbreed, but I have had no opportunity of observing a fertile cross, although I have seen wild birds which looked very like hybrids between the two species. The diet of the present species is perhaps more insectivorous than that of the next. It is much addicted to the habit of fly-catching in the evenings, and is often seen on the ground feeding on ants and grubs under trees. It is less of a garden bird than the next species. Its staple food in these parts is the berries of the Ber (*Zizyphus vulgaris*) and Boquain (*Melia azedarach*) trees. Numbers of this species are caught in Bannu in winter and hawked about the bazaars, perched on pieces of stick, to which they are attached by a long string tied round the body. Although I have examined several of these captives and bought many in order to release them, in no case have I seen among them a bird of the next species, which is also so common at Bannu. I attribute the ease with which the present species is caught to its greater feebleness and to its partiality for the grubs of the white ant, with which the traps are usually baited: this attraction the birds are simply unable to resist.”

This Bulbul is resident in Kohat, and breeds freely in the Station and in the orchards round about.

[285.] *MOLPASTES LEUCOTIS*. The White-eared Bulbul.

Rattray, J. B. N. H. S. xii. p. 338 (common in February and March, a few pairs staying to breed); Marshall, *op. cit.* xiv. p. 602 (a few occur in March and April); Cumming, *op. cit.* xvi. p. 686 (Seistan: saw several which appeared to be of this species, but failed to secure any).

In July 1905 Major Magrath found a pair of Bubluls nesting in his garden which he took to be of the present species. At that time he concluded that this bird in summer replaced the last as the breeding species in Kohat and was unaware, as we subsequently discovered (*vide* note on the last species), that *M. leucogenys* bred commonly in and around Kohat. Unfortunately we did not critically study the Bubluls at that time, and not having since spent a "hot-weather" in Kohat we have not had an opportunity of collecting any examples of the present species. According to Major Magrath, the note of this bird is well represented by the following words repeated rapidly: "Quick—a drink with you?"

[*MOLPASTES MAGRATHI*. Magrath's Bulbul.

Whitehead, Bull. B. O. C. xxi. p. 48 (1908).

In February 1907 Major Magrath sent a skin of a Bulbul obtained in the Bannu District to Dr. Bowdler Sharpe. The latter and other eminent ornithologists who examined it, finding that there was nothing exactly like it in the National Collection, were of opinion that it belonged to a new species. This opinion was further strengthened by the arrival of three more specimens collected by Major Magrath in the same locality. These all agreed more or less with the first example sent, except that the black of the breast in one was clearly defined from the whitish lower parts, instead of graduating into them as in the other specimens. At a meeting of the British Ornithologists' Club held on the 15th of January, 1908, I exhibited these specimens and

described the bird as a new species, naming it as above in honour of its discoverer.

Major Magrath's specimens differ from the hybrid forms already described in being closely allied to *M. leucotis* and not to *M. leucogenys*. It is difficult to ascribe them to a hybrid form, as in the case of the Kohat birds, because *M. intermedius* does not, Major Magrath assures me, occur in Bannu, and *M. leucogenys* there is always more or less true to type.]

[320.] *SITTA KASHMIRENSIS*. Brooks's Nuthatch.

Fulton, J. B. N. H. S. xvi. p. 48 (Chitral: very common from 6000 to 11,000 ft.; Ward, op. cit. xvii. p. 111 (obtained in April in Kashmir).

Fairly common on the Peiwar Spur of the Safed Koh and in the adjoining nullahs from 7500 to 10,000 ft.

[323.] *SITTA LEUCOPSIS*. The White-cheeked Nuthatch.

Fulton, J. B. N. H. S. xvi. p. 48 (Chitral: very common from 7000 to 12,000 ft.); Rattray, t. c. p. 424 (fairly common above 8000 ft.: Murree Hill); Ward, op. cit. xvii. p. 111 (fairly common).

This is the common Nuthatch of the Safed Koh, from 8000 ft. to tree-limit. Its curious call-note, resembling the word "pain" (pronounced like the French word for "bread"), may be heard all day long.

[327.] *DICRURUS ATER*. The Black Drongo, or King Crow.

Rattray, J. B. N. H. S. xii. p. 338 (summer visitor to Thall); Fulton, op. cit. xvi. p. 48 (Chitral: common in summer up to 5500 ft.); Ward, op. cit. xvii. p. 111 (Kashmir: occurs up to 7000 ft.).

One of our commonest summer visitors from the plains up to 8500 feet in the Kurram Valley, the first birds arriving in the middle of March and the species becoming common a fortnight later. It disappears towards the end of October. Probably, however, the Drongo we observed above 7000 feet on the Safed Koh belonged to the allied species *D. longicaudatus*, the differences not being very marked and the latter

being a common bird in the Murree Hills. Unfortunately no examples were procured.

[341.] *CERTHIA HIMALAYANA*. The Himalayan Tree-Creeper.

Fulton, J. B. N. H. S. xvi. p. 48 (shot in August); Rattray, t. c. p. 424 (Murree Hills: very comon); Ward, op. cit. xvii. p. 111 (abundant up to 10,000 ft.).

623. ♀ ad. Kohat, 1760 ft., 29th February.

690. ♀ ad. „ „ 16th March.

A common cold-weather visitor to the District from September till April, occurring on the Samana up to 6000 feet. It does not by any means restrict itself to trees: I have often noticed it climbing up walls.

Breeds in fair numbers on the Safed Koh, from 7000 to 9000 feet.

The call-note is a faint squeak, rarely heard in winter, though in summer its loud but rather monotonous song is constantly uttered.

[348.] *TICHODROMA MURARIA*. The Wall-Creeper.

Marshall, J. B. N. H. S. xiv. p. 602 (Quetta: occurs in winter from 1000 feet upwards); Fulton, op. cit. xvi. p. 48 (Chitral: common from October till April); Ward, op. cit. xvii. p. 111 (winter visitor, sometimes assuming black throat-feathers).

40. Ad.? Khushalgarh, 1200 ft., 16th December.

315. ♂ juv. Safed Koh, 15,000 ft., 12th July.

A winter visitor to the District from October till mid-March; common on the Samana, but less so elsewhere. Generally found singly or in pairs about cliffs, but occasionally some distance from rocks on earth-banks.

An example shot on the 13th of March had the black feathers on the throat and breast well developed.

On the 12th of July, 1906, I came across a newly-fledged family at 15,000 feet on the Safed Koh, in the shale screes, and shot one specimen. The wing- and tail-feathers were only partially grown, the bill was quite soft and very short,

and bits of down were still adhering to its plumage. It would therefore appear that the Wall-Creeper nests within Indian limits. When touring through the Kaghan Valley, Hazara District, this year (10th of July, 1908) my shikari minutely described to me a bird that he had seen that day, which could scarcely be anything else but a Wall-Creeper.

Mr. S. L. Whympers also informed me in a letter (I have not got this by me, but, so far as I remember, it was to the following effect) that a friend of his had actually found a Wall-Creeper nesting somewhere on the North-West Frontier, but had been unable to get at the nest.

ANORTHURA MAGRATHI. Whitehead's Wren.

Whitehead, Bull. B. O. C. xxi. p. 19 (1908).

343. ♂. Safed Koh, 12,500 ft., 6th August.

344. ? Safed Koh, 8500 ft., 8th August.

Bill blackish, base and gape yellow; tarsus brownish flesh-coloured; iris brown.

This appears to be a well-marked race of *A. neglecta*, differing from it in being almost uniform in colouring above, the barring being scarcely perceptible, and in having the throat ash grey. In summer it is found fairly commonly on the Safed Koh, from 8000 feet upwards, chiefly in the juniper-scrub. I have met with it on the very summit of the range, picking about amongst the rocks.

In habits and song it closely resembles *A. parvula*.

[358.] REGULUS CRISTATUS. The Goldencrest.

Ward, J. B. N. H. S. xvii. p. 111, and xviii. p. 461 (not common; eggs taken in May, June, and July in the Liddar Valley, Kashmir).

Fairly numerous in summer amongst the firs and deodars of the Safed Koh from 8000 to 11,000 feet.

[359.] AËDON FAMILIARIS. The Grey-backed Warbler.

Ratray, J. B. N. H. S. xii. pp. 225, 339, & 579 (fairly common at Thall; found several nests); Watson, op. cit. xv. p. 144 (occurs at Chaman, near Quetta, in August and

September); Cumming, op. cit. xvi. p. 686 (very common in Seistan in summer).

246. ♀ ad. Kohat, 1760 ft., 6th May.

Fairly common up to 3500 feet, from April till September, in dry scrub-jungle; round Thall it is particularly common. In the breeding-season the male may often be seen perched on the top of a bush, pouring forth its sweet song. In many of its habits it resembles the Indian Robin (*Thamnobia cambayensis*), especially in the way it flirts and spreads its tail, and also in its tame and confiding habits. If the intruder happens to approach the nest, the pair will follow him about uttering their alarm-cry—*wütch, wütch*. If the nest be found they get terribly excited, and will sometimes remain hovering in the air within a few feet. Of five nests taken, three were placed in thorn-bushes close to the ground, the other two on the ground under low shrubs. They were cup-shaped and loosely constructed of coarse grass and roots. I looked in vain for the bit of serpent-skin which Mr. Dresser, in the 'Manual of Palæartic Birds,' states is always found in the nest of this species.

The specific title (*familiaris*) is very appropriate, but the trivial name (Grey-backed) seems to be only misleading, for the back is fulvous-brown, the most noticeable feature being the bright red, white-tipped tail which the bird is so fond of displaying.

[362.] LOCUSTELLA STRAMINEA. The Turkestan Grass-hopper-Warbler.

742. ♀ ad. Kohat, 1760 ft., 25th March.

749. Sex? „ „ 26th March.

776. ♂ ad. „ „ 2nd April.

Passes through the District in fair numbers from the third week in March till the middle of May. Not observed in autumn. It is chiefly found on the grass-farms and in young crops, occasionally in the gardens. It is not such a skulker as one would expect; there is no difficulty in flushing it, but it is not easy to observe or to shoot, except on the wing.

[363.] *ACROCEPHALUS STENTOREUS.* The Indian Great Reed-Warbler.

Ward, J. B. N. H. S. xvii. p. 112 (breeds in Kashmir in June).

Common on migration from the end of March till well into June, and again in August and September; possibly a few stay to nest in Kohat.

I found a small colony nesting in a reed-bed near Dandar, in the Kurram Valley, on the 9th of July.

[366.] *ACROCEPHALUS DUMETORUM.* Blyth's Reed - Warbler.

Ward, J. B. N. H. S. xvii. p. 112 (summer visitor to the Valley of Kashmir).

203. ♀ ad. Kohat, 1760 ft., 13th April.

231. ♂ ad. „ „ 29th April.

247. ♂ ad. „ „ 6th May.

360. Juv. „ „ 30th August.

Like the last species, this Warbler passes through in great force in April, May, and early June, returning in August and September. Not often found in reed-beds, preferring shady gardens and orchards. The sweet rambling song may often be heard issuing from the midst of a thick mulberry-tree. Probably breeds in the Upper Kurram Valley.

The upper plumage of this species is distinctly tinged with olivaceous. Mr. Oates does not mention this in the 'Fauna of British India.'

[367.] *ACROCEPHALUS AGRICOLA.* The Paddyfield Reed-Warbler.

Ward, J. B. N. H. S. xvii. p. 112 (nest not found).

729. ♂ ad. Kohat, 1760 ft., 23rd March.

Our commonest Reed-Warbler on migration, passing through from the third week in March till about the end of May and returning in August, September, and October. Seldom found far away from reed-beds or irrigated crops.

Occurs with the last species on migration in the Kurram Valley, and perhaps breeds there. Both Davidson ('The Ibis,'

1898, p. 9) and Lieut. Wilson (J. B. N. H. S. xii. p. 635) found it nesting in Kashmir.

[374.] *ORTHOTOMUS SUTORIUS*. The Indian Tailor-bird.

Ward, J. B. N. H. S. xvii. p. 112 (occurs in Jammu, but is rare).

751. ♀. Kohat, 1700 ft., 27th March.

A resident, common in gardens and orchards around Kohat. Not observed in the Kurram Valley.

[377.] *LUSCINIOLA MELANOPOGON*. The Moustached Sedge-Warbler.

152. ♂ ad. Kohat, 1850 ft., 19th March.

696. ♀ ad. Lachi, 1540 ft., 17th March.

A winter visitor in small numbers, largely reinforced in February and March. I have searched for it in May in the plains without success, but, on the other hand, I shot an example at Dandar (4700 ft.) in the Kurram Valley on the 20th of April. The wing and wing-muscles, however, are so feeble that it can scarcely go very far away to breed. Has a pleasing song which is often uttered, even in winter.

[381.] *CISTICOLA CURSITANS*. The Rufous Fantail-Warbler.

77. ♀ ad. Kohat, 1760 ft., 11th January.

Abundant in summer wherever there is cultivation. The majority leave in autumn, but a few stay through the winter, and are then more often found in and around reed-beds than elsewhere. In the Kurram Valley we observed it as high as Parachinar (5700 ft.).

[384.] *FRANKLINIA BUCHANANI*. The Rufous-fronted Wren-Warbler.

121. ♂ ad. Jabba, 2400 ft., 18th February.

781. ♂ ad. Kohat, 1760 ft., 3rd April.

A common resident in the scrub-jungle of the District, though it does not ascend the hills. It usually occurs in small parties or pairs and is always on the move, either creeping about in bushes or running mouse-like along the



ground from one bush to another. In spring the air resounds with its cheery little song.

[394.] *HYPOLAIS RAMA*. Sykes's Tree-Warbler.

Marshall, J. B. N. H. S. xiv. p. 602 (summer visitor, nesting in May: Quetta); Bentham, op. cit. xvi. p. 749 (nests freely in rose-hedges: Quetta).

546. ♀ ad. Thall, 2500 ft., 11th May.

759. ♀ ad. Kohat, 1760 ft., 29th March.

Occurs sparingly on migration.

[396.] *HYPOLAIS CALIGATA*. The Booted Tree-Warbler.

Ward, J. B. N. H. S. xvii. p. 112 (passes through Baltistan, but rare).

229. ♂ ad. Kohat, 1760 ft., 29th April, 1906.

551. ♀ ad. Thall, 2500 ft., 15th May, 1907.

Passes through in fair numbers in April and May, returning in August. Usually found in dry scrub. In appearance very like *Phylloscopus tristis*, but not quite so active. I think it possible that this species may breed within our limits.

[Major Magrath procured an example of the rare *Hypolais obsoleta* at Bannu on the 8th September, 1907. It was creeping about in grass with others.]

[398.] *SYLVIA CINEREA*. The Common Whitethroat.

Ward, J. B. N. H. S. xvii. p. 112.

357. ♀ ad. Kohat, 1760 ft., 30th August.

358. ♂ ad. „ „ „

Not common. Only a few observed during the autumn migration at the end of August and beginning of September 1906.

[399.] *SYLVIA JERDONI*. The Eastern Orphean Warbler.

Marshall, J. B. N. H. S. xiv. p. 602 (common in April and May: Quetta); Cumming, op. cit. xvi. p. 687 (common in the Tamarisks: Seistan); Betham, t. c. p. 831 (nests freely in April and May above 7000 ft.: Quetta); Ward, op. cit. xvii. p. 112 (recorded at Gilgit on migration).

491. ♀ ad. Thall, 2500 ft., 14th April.

A summer visitor, and not common. Has a very fine song.

We found several pairs in the scrub round Thall in April. On picking up the above-mentioned example, I noticed some cobwebs in the bill, and on looking round found a nest in a thick bush close by. It was composed of roots, bits of green plants, and a lot of cobwebs, and had not been completed.

[400.] SYLVIA NANA. The Desert-Warbler.

Watson, J. B. N. H. S. xv. p. 145 (occurs near Chaman). 452. Sex ? ad. Lachi, 1500 ft., 24th February.

This example was shot creeping about in a thorn-bush in the desert. Only one other was seen, in a similar spot, the following year.

[401.] SYLVIA ALTHEA. Hume's Lesser Whitethroat.

Marshall, J. B. N. H. S. xiv. p. 602 (believes that this sp. is fairly common at 8000 ft. in May); Fulton, op. cit. xvi. p. 48 (shot three in May between 5000 and 7000 ft.); Ward, op. cit. xvii. p. 112, and xviii. p. 461 (eggs taken in May and July at 8000 ft.).

232. ♀ ad. Kohat, 1760 ft., 29th April.

Passes through Kohat and the Kurram Valley in spring and autumn, but is not common. In spring I have generally observed it in Shisham trees (*Dalbergia sissoo*) in company with the next species. These trees are then in flower and attract much insect-life. Birds shot in them generally have their heads covered with pollen. This White-throat is a beautiful songster.

[402.] SYLVIA AFFINIS. The Indian Lesser Whitethroat.

Ratray, J. B. N. H. S. xii. p. 338 (winter visitor, not common: Thall); Betham, op. cit. xvi. p. 831 (a few pairs nest round Quetta); Ward, op. cit. xvii. p. 112 (common in summer in Kashmir).

41. Sex? Khushalgarh, 1200 ft., 16th December.

101. ♀. Kohat, 1760 ft., 5th February.

Passes through in large numbers in spring and autumn, a few staying for the winter. Breeds freely in the Kurram Valley in Ilex-scrub and low bushes from 6000 to 8000 feet. Like the last species it has a pleasing and remarkably loud

song, often uttering it on the wing. Much more confiding in summer than at other seasons.

[403.] *SYLVIA MINUSCULA*. The Small Whitethroat.

Marshall, J. B. N. H. S. xiv. p. 602 (small flocks on migration in April).

521. ♀ ad. Peiwar, 6500 ft., 22nd April.

Probably not uncommon, but owing to its close resemblance to the last species must have often been overlooked. Altogether I shot some half-dozen specimens around Kohat in the cold weather. It appears to breed, in company with the last species, in the Kurram Valley, this example having been secured in a locality where many of the latter were then nesting.

[407.] *PHYLLOSCOPUS TRISTIS*. The Brown Willow-Warbler.

Marshall, J. B. N. H. S. xiv. p. 602 (shot one in February); Ward, op. cit. xvii. p. 112 (eggs taken in Ladakh).

56. ♂ ad. Kohat, 1760 ft., 31st December.

110. ♂ ad. „ „ 11th February.

Extremely common up to about 5000 feet from early September till about the middle of May. Found everywhere, in gardens, groves, scrub-jungle, and desert; also on stony hill-sides where there is vegetation, in bare stubbles, and standing crops. It frequents more especially the neighbourhood of water, reed-beds, water-plants, and irrigation cuts. An expert flycatcher and very active. Except in spring, it is very silent.

[408.] *PHYLLOSCOPUS INDICUS*. The Olivaceous Willow-Warbler.

Ward, J. B. N. H. S. xvii. p. 112 (eggs taken in August in Ladakh, 11,500 ft.).

185. ♂ ad. Kohat, 1760 ft., 5th April.

Passes through Kohat in small numbers on migration in March and April. I only once observed it on the return migration, when a solitary example was seen on the 16th of September. Nests freely in parts of the Safed Koh Range. Differs in habits from other Willow-Warblers in

being rather a skulker, as it is usually found hopping and creeping about in the undergrowth. Its loud call-note of "tack" often indicates its whereabouts.

[411.] *PHYLLOSCOPUS NEGLECTUS*. The Plain Brown Willow-Warbler.

Ward, J. B. N. H. S. xviii. p. 461 (eggs taken and parents secured at Kargil in May and June).

706. ♀ ad. Kohat, 1760 ft., 18th March.

This species is so difficult to distinguish from *P. tristis* until actually examined in the hand, that it is impossible to say whether it is fairly common or merely a straggler. The above-mentioned example was the only one secured. It was busily fly-catching in a willow just like *P. tristis*.

[415.] *PHYLLOSCOPUS PROREGULUS*. Pallas's Willow-Warbler.

Ratray, J. B. N. H. S. xvi. p. 424 (nests freely in the Galis); Ward, op. cit. xvii. p. 112 (common in Kashmir).

664. ♀ ad. Marai, 3000 ft., 9th March.

667. ♀ ad. Kachai, 2700 ft., 10th March.

Not common. I have met with it in spring at the foot of the hills and in summer on the Safed Koh at 8500 feet. Its song is very characteristic.

[416.] *PHYLLOSCOPUS SUBVIRIDIS*. Brooks's Willow-Warbler. ←

102. ♂ ad. Kohat, 1760 ft., 5th February.

113. ♀ ad. „ „ 10th February.

276. Sex? Samana, 6500 ft., 12th April.

319. ♀ ad. Safed Koh, 8800 ft., 13th July.

Fairly common in the District from October to April. Generally found solitary or in pairs in scrub and wild olive-groves, more rarely in orchards and gardens. Occurs on the Samana in large numbers on migration. Nests freely on the lower slopes of the Safed Koh from 7000 to 9000 feet. A nest found on the 13th of July, 1906, was evidently an old structure re-lined, and was placed in the bank of a nullah under cover of a small bush. It was of the usual Willow-Warbler type and contained four fresh eggs (this was the

full clutch, the female having no eggs in the oviduct). They were white, thickly spotted with dark red, and averaged  $\cdot 55 \times \cdot 4$  inch.

In summer this Warbler frequently utters a loud monosyllabic call-note, not unlike that of the next species but not so loud. In winter this is only occasionally heard.

[418.] PHYLLOSCOPUS HUMII. Hume's Willow-Warbler.

Fulton, J. B. N. H. S. xvi. p. 48 (only two obtained in Chitral); Rattray, t. c. p. 424 (very common in the Murree Hills); Ward, op. cit. xvii. p. 113 (breeds in Kashmir).

48. Ad. Kohat, 1760 ft., 23rd December.

55. ♂ ad. „ „ 31st December.

119 & 120. ♂ ad. Kohat, 1760 ft., 16th February.

153. Ad. Kohat, 1760 ft., 18th March.

Abundant in the cold weather in Kohat from September till the end of April, frequenting gardens, orchards, and groves—usually singly. It has a loud call-note resembling the syllable “*chwey*,” which is constantly uttered. Occurs on the Samana on migration, and nests in large numbers on the Safed Koh from 7000 to 11,000 feet. Its curious song, which may be rendered “*pi-pi-pia-z-z*” (this being repeated with variations), is first heard in March, whilst still in its winter-quarters, and is continued throughout the summer, being usually uttered from the midst of a thick tree.

[421.] ACANTHOPNEUSTE NITIDA. The Green Willow-Warbler.

Ward, J. B. N. H. S. xvii. p. 113.

766. Ad. Kohat, 1760 ft., 31st March.

784. ♂ ad. „ „ 2nd April.

Passes through Kohat and the Kurram Valley in large numbers from the last week in March till the end of May, returning in September, when comparatively few are seen. This is the last Willow-Warbler to leave, and I have met with it at Kohat up till the 28th of May. Major Magrath says that this species is extremely common in Bannu in September and October. Its relative scarcity at that season in Kohat, together with that of many other species, may

perhaps be accounted for by its following the Kurram River down through the Bannu District instead of turning off at Thall up the Ishkalai, an insignificant stream which connects the Miranzai and Kurram Valleys.

[424.] *ACANTHOPNEUSTE MAGNIROSTRIS*. The Large-billed Willow-Warbler.

Ratray, J. B. N. H. S. xvi. p. 425 (fairly common in the Galis); Ward, op. cit. xvii. p. 113 (apparently rare).

I have only met with this species on the lower slopes of the Safed Koh, where it nests in small numbers between 7000 and 8000 feet. The call-note is loud and characteristic, the song resembling the syllables "*dirtee*," hence its native name "*Deru*."

[428.] *ACANTHOPNEUSTE OCCIPITALIS*. The Large-crowned Willow-Warbler.

Ratray, J. B. N. H. S. xvi. p. 425 (very common round Murree); Ward, op. cit. xvii. p. 113 (nests from 7000 to 8000 ft. in Kashmir).

535. ♂ ad. Kurram Valley, 6800 ft., 28th April.

Occurs sparingly in the Kohat orchards in April and May, but not observed in autumn. Abundant, however, on the Safed Koh Range in summer from 6000 to 10,00 feet, being quite the commonest Willow-Warbler there. Its loud monotonous song may be heard from dawn to dusk all the summer through.

[434.] *CRYPTOLOPHA XANTHOSCHISTA*. Hodgson's Grey-headed Flycatcher-Warbler.

Ratray, J. B. N. H. S. xvi. p. 426 (rare in Murree Hills, one nest found); Ward, op. cit. xvii. p. 113.

624. ♀ ad. Kohat, 1760 ft., 29th February.

629. ♂ ad. (testes big). Kohat, 1850 ft., 1st March.

665. ♂ ad. Marai, 3000 ft., 9th March.

A fairly common winter-visitor to the district, arriving about the third week in October and leaving early in April. This species and *Suya crinigera* are the only Warblers found on the Samana above 5000 feet all through the winter; it is difficult to understand how they manage to pick up a living,

the hill-side being often covered with snow for days together. Frequents scrub-jungle, gardens, and orchards, going about in small parties, and often uttering its pretty little song even in mid-winter.

[445.] SCOTOCERCA INQUIETA. The Streaked Scrub-Warbler.

Ratray, J. B. N. H. S. xii. p. 338 (Thall : common) ; Watson, op. cit. xv. p. 145 (very common round Chaman, near Quetta).

436. ♀ ad. Banda, 1930 ft., 27th January.

608. ♂ (testes very big). Lachi, 1540 ft., 25th February.

A common resident among scrub on dry stony hill-sides, but not seen above 3500 feet, nor far from the foot of the hills. The specific name is very appropriate : it is never still, but is always flitting or running mouse-like about from bush to bush, only pausing occasionally to sing a few notes of its cheery little song.

[456.] CETTIA ORIENTALIS. The Eastern Bush-Warbler.

167. ♂ ad. Lachi, 1540 ft., 27th March.

701. ♂ ad. Kohat, 1760 ft., 17th March.

732. ♂ ad. „ „ 23rd March.

734. ♀ ad. Chillibagh, 2100 ft., 24th March.

Bill dark brown, lower mandible flesh-coloured, gape yellowish; tarsus flesh-coloured; iris brown.

Passes through Kohat in fair numbers in March, frequenting reed-beds, gardens, and generally thick cover near water. A great skulker, usually occurring singly. My attention was first drawn to this species by a loud note, resembling the syllable “chéy,” proceeding from the midst of a tamarisk. After much peering, I made out a small brown bird vigorously flirting its tail and evidently much resenting my presence. It was in this way that I always met with it.

[458.] SUYA CRINIGERA. The Brown Hill-Warbler.

Ratray, J. B. N. H. S. xvi. p. 426 (nests freely in Murree Hills) ; Ward, op. cit. xvii. p. 113 (common in Kashmir).

663. ♀ ad. Marai, 4000 ft., 9th March.

677. ♂ ad. Thall, 2500 ft., 14th March.

A resident on the Samana and fairly common. In winter it descends to the Miranzai Valley, occurring commonly in the scrub-jungle near the foot of the hills.

We did not meet with it in the Kurram Valley, though I shot one at the entrance, near Thall.

[462.] *PRINIA LEPIDA*. The Streaked Wren-Warbler.

Cumming, J. B. N. H. S. xvi. p. 687 (fairly common amongst the Tamarisks: Seistan, 1700 ft.); Ward, *op. cit.* xvii. p. 114 (occurs in outer hills, but not in Kashmir proper).

617. ♂ (testes very big). Lachi, 1540 ft., 26th February).

697. ♀ ad. Lachi, 1540 ft., 17th March.

698. ♂ ad.       "       "       "

A resident in the plains, and not uncommon about reed-beds and tamarisk-scrub, being particularly abundant in the Lachi Plain. Nesting-operations are begun in March, and from then till May the curious reeling song is constantly to be heard.

[[463.] *PRINIA FLAVIVENTRIS* Deless.

Major Magrath has found this species common in the reed-beds of Bannu, the adjoining District on the south, and has forwarded examples to the British Museum.]

[466.] *PRINIA INORNATA*. The Indian Wren-Warbler.

Rattray, J. B. N. H. S. xii. p. 337 (Thall: occurs in the reeds); Ward, *op. cit.* xvii. p. 113.

683. Ad. Thall, 2500 ft., 14th March.

750. ♂ ad. Kohat, 1600 ft., 26th March.

Resident but rather rare, except along the banks of the Kurram River.

In Bannu, however, where the country is more suited to its habits, Major Magrath has found it extremely common.

[469.] *LANIUS LAHTORA*. The Indian Grey Shrike.

Rattray, J. B. N. H. S. xii. p. 338 (Thall: an uncommon summer visitor); Marshall, *op. cit.* xiv. p. 602 (in April



near Quetta) ; Ward, op. cit. xvii. p. 479 (occurs in Jammu).

567. ♂ ad. Kohat, 1760 ft., 6th February.

658. ♀ ad. Hangu, 2650 ft., 8th March.

A resident, chiefly found in the desert, but not commonly, more numerous in winter than summer. Major Magrath found a nest containing four slightly incubated eggs on the 12th of May near Thall. Not met with above 3500 feet in the Kurram Valley.

[473.] *LANIUS VITTATUS.* The Bay-backed Shrike.

Rattray, J. B. N. H. S. xii. p. 338 (very common and resident at Thall) ; Marshall, op. cit. xiv. p. 602 (Quetta ; an uncommon summer visitor) ; Fulton, op. cit. xvi. p. 48 (Chitral : common in summer up to 6000 ft.).

520. ♂ ad. Kurram Valley, 6500 ft., 23rd April.

Fairly common from the last week in March till September in Kohat and the Kurram Valley. We both believe that we have observed stray examples of this species in winter, but cannot be certain. I noted it in Lahore, some 200 miles S.E., early in February.

[476.] *LANIUS ERYTHRONOTUS.* The Rufous - backed Shrike.

Rattray, J. B. N. H. S. xii. p. 338 (Thall ; abundant) ; Marshall, op. cit. xiv. p. 602 (Quetta : very common in summer) ; Fulton, op. cit. xvi. p. 43 (common in Chitral in summer up to 7000 ft.) ; Betham, t. c. p. 750 (breeds freely) ; Ward, op. cit. xvii. p. 479 (widely distributed in Kashmir).

A resident, and extremely common in summer everywhere up to 7000 feet. The majority leave for warmer climes in autumn.

[479.] *LANIUS ISABELLINUS.* The Pale-Brown Shrike.

Marshall, J. B. N. H. S. xiv. pp. 602, 606 (Quetta : a summer visitor, nesting in May between 7000 and 9000 feet).

109. ♀ ad. Kohat, 1700 ft., 8th February.

A fairly common winter visitor from October to April.

I shot an example in the Kurram Valley at 6500 feet on the 2nd of May; possibly a few pairs nest up there.

[495.] *PERICROCOTUS BREVIROSTRIS*. The Short-billed Minivet.

Fulton, J. B. N. H. S. xvi. p. 49 (Chitral: summer visitor, nesting commonly from 7000 to 9000 ft.); Rattray, t. c. p. 426 (nests freely in Murree Hills); Ward, op. cit. xvii. p. 479 (breeds in Kashmir).

A common winter visitor to the District from the end of September to April. Nests freely on the Safed Koh between 6000 and 8000 feet. Captain Keen observed a few on the Samana all through the summer, and believes that they nested there. An example collected by Major Magrath in Bannu, and now in the National Collection, is typical.

[500.] *PERICROCOTUS PEREGRINUS*. The Small Minivet.

Ward, J. B. N. H. S. xvii. p. 479.

Very rare. I came across a pair in some camel-thorn-scrub (*Acacia modesta*), three miles west of Makhud on the Indus, but unfortunately failed to secure them. It is a bird I know well, however, having frequently met with it near Rawal Pindi (100 miles east), and I have also shot it there.

[518.] *ORIOIUS KUNDUO*. The Indian Oriole.

Rattray, J. B. N. H. S. xii. p. 338 (common on migration); Marshall, op. cit. xiv. p. 602 (a summer visitor to Quetta); Watson, op. cit. xv. p. 145 (Quetta: common in gardens, mostly immature); Fulton, op. cit. xvi. p. 49 (very common in summer in Chitral up to 8000 ft.); Rattray, t. c. p. 426 (common near Murree at 5500 ft.); Ward, op. cit. xvii. p. 479 (breeds in Kashmir up to 6000 ft.).

A large number pass through Kohat in April and the beginning of May, returning in August and September: many breed in the orchards of the Kurram Valley, a few also in Kohat.

[528.] PASTOR ROSEUS. The Rosy Pastor.

Rattray, J. B. N. H. S. xii. p. 338 (Thall : passing through in vast numbers); Marshall, op. cit. xiv. p. 602 (common at Chaman at the end of April).

Major Magrath has written the following note on this species in Kohat:—"Passes through this district in vast flocks during the spring and autumn migrations. At the spring passage the birds are slaughtered in hundreds by the natives, every man possessing a firearm turning out for the sport. They arrive about the middle of April and the rush continues till the middle of May. The mulberries, which are ripe at this season, are eagerly devoured by them, and the ripe corn also suffers from their depredations. A few young birds remain in the district throughout the hot weather. The return passage begins about the end of July, being at its height by the middle of August, and lasting into September. Very few adult birds are to be seen at this time. The direction of the flight through the district is N.W. and S.E. for spring and autumn migrations respectively. The vast flocks which roost in and about the cantonments become an unmitigated nuisance while they are with us." Since writing the above, Major Magrath has noted the appearance of small flocks of adult birds in the middle of summer, as also have Captain Keen and I; in fact, between us we have noted them at short intervals throughout the summer, and it seems probable that some of them at least breed a good deal nearer India than Asia Minor. Small flocks of immature birds stay with us till November. Curiously enough, in the spring of 1907 only a few small flocks were observed passing through the Kohat district. The migration appears to have been diverted elsewhere, though whether this was due to the district being invaded at the time by vast armies of locusts in the crawling stage, I cannot say. One would have imagined that this would have had an opposite effect.

[529.] STURNUS HUMIL. The Himalayan Starling.

Rattray, J. B. N. H. S. xii. p. 338; Marshall, op. cit. xiv. p. 602 (rare at Quetta, shot in March and April); Ward,

op. cit. xvii. p. 479 (very common in Kashmir in summer from 5000 to 7000 feet).

We must have overlooked this Starling. Colonel Rattray records it from Thall as "not common, but a fair number may be seen any day during April and May. . . ." An example shot by me on the 14th of April (the last date on which a Starling was seen) proved to be *Sturnus menzbieri*.

[530.] STURNUS PORPHYRONOTUS. The Central Asian Starling.

Watson, J. B. N. H. S. xv. p. 145 (in flocks in Chaman, near Quetta, in December); Ward, op. cit. xvii. p. 479 (does not appear to breed in Kashmir); Perreau, op. cit. xviii. p. 186 (occurs in Chitral).

62. ♂ ad. Kohat, 1760 ft., 4th January.

688. ♂ ad. Kohat, 1760 ft., 16th March.

719, 721. ♂ ♀ ad. Kohat, 1760 ft., 21st March.

A winter visitor, not so common as the next species, occurring singly or in flocks, often in company with *S. menzbieri*.

As Dr. Sharpe has pointed out to me, both Major Magrath's examples from Bannu and mine from Kohat shew signs of the mixing of this race with some other, the head being generally marked in places with purple gloss.

[532.] STURNUS MENZBIERI. The Common Indian Starling.

Rattray, J. B. N. H. S. xii. p. 339 (Thall: common in winter); Fulton, op. cit. xvi. p. 49 (Chitral: common winter visitor); Cumming, t. c. p. 687 (probably the Starling which occurs in flocks in Seistan in winter); Ward, op. cit. xvii. p. 479 (the majority migrate through, a few nest).

63. ♂ ad. Kohat, 1760 ft., 4th January.

117. ♂ ad. „ „ 13th February.

718-720. ♂, ♀, ♂. Kohat, 1760 ft., 21st March.

Abundant in the cold weather, arriving about the third week in October and leaving towards the middle of April.

[544.] TEMENUCHUS PAGODARUM. The Black-headed Myna.

Fulton, J. B. N. H. S. xvi. p. 49 (very common in summer in Chitral at 5000 ft.); Rattray, t. c. p. 427 (rare in the Murree Hills); Ward, op. cit. p. 479 (occurs in Kashmir, but is rare).

A summer visitor to the district. I have only twice met with this species, once on the 25th of August, when I observed about a dozen feeding in a garden in company with the Common Myna, and again a pair on the 4th of June. Mr. Donald, the Political Officer, however, tells me that a few pairs nest regularly every year near Hangu (2700 feet), usually selecting holes in the Boquain tree (*Melia azedarach*) as nesting-sites.

[549.] ACRIDOTHERES TRISTIS. The Common Myna.

Rattray, J. B. N. H. S. xii. p. 339 (common and resident); Marshall, op. cit. xiv. p. 602 (a few occur in spring); Fulton, op. cit. xvi. p. 49 (resident in Chitral, occurring up to 8000 ft. in summer); Rattray, t. c. p. 427 (common around Murree); Ward, op. cit. xvii. p. 479.

Resident and extremely common, occurring up to 7000 feet in the Kurram Valley in the summer, and at Fort Lockhart (6500 feet) all the year round, in spite of the heavy snowfall.

[551.] ACRIDOTHERES GINGINIANUS. The Grey Bank-Myna.

Small flocks occur in the District in February and March, and are usually seen following the cattle on the grass-farms. Major Magrath has found the bird fairly common in Bannu, and has sent an example to the British Museum.

AMPELIS GARRULUS. The Waxwing.

Whitehead, Bull. B. O. C. xxi. p. 19.

416. ♀ ad. Samana, 6500 ft., 16th December, 1906.

I first met with this handsome bird on the 11th of December, in a small garden near the Fort, but just as I had sighted it through my glasses, up flew a flock of Gold-

finches and began mobbing it, and away it went uttering a soft whistling note. Five days later, on visiting the same spot, I was lucky enough to again find a Waxwing there. It was in fine condition with four wax-like tips to the secondaries of each wing. In addition to this example, Major Magrath shot one, a male (extremely fat), in his garden in Bannu, lat. 33° (apparently the furthest southern record for this species), on the 20th of March. Colonel Ward records another secured on the 8th of the same month at 7000 feet in Kashmir.

[To be continued.]

IV.—*Note on the Corvus neglectus of Schlegel.*

By T. SALVADORI, H.M.B.O.U.

COLLEUS NEGLECTUS.

? *Corvus dauricus*  $\beta$  var. Pall. Zoogr. Rosso-As. p. 388 (1811).

*Corvus dauricus* jun. Temm. et Schleg. Fauna Jap., Aves, p. 80, tab. 40 (1850) (Japan).

*Corvus neglectus* Schleg. Bijdr. Dierk. Amsterd. Afl. 8, Corvus, p. 16 (1859) (Japan); Swinh. Ibis, 1867, p. 227 (Amoy); Gray, Hand-list, ii. p. 14. no. 6233 (1870); Gieb. Thes. Orn. i. p. 786 (1872) (= *C. dauricus*!); Dress. B. of Eur. iv. p. 527 (1875); Blak. et Pryer, Ibis, 1878, p. 232 (Japan); iid. Tr. As. Soc. Jap. x. p. 143 (1882); Seeb. Ibis, 1884, p. 180 (intermediate form between *C. dauricus* and *C. neglectus*; hybrid?); id. B. Jap. Emp. p. 97 (1890) (Japan, Eastern Siberia to N. China); Dress. Man. Pal. B. i. p. 420 (1902); La Touche, Ibis, 1906, p. 433 (Chinkiang).

*Corvus monedula* Schrenck (nec Linn.), Reis. Forsch. Amurl. i. pt. 2, p. 324 (1860); Sewerz. Journ. f. Orn. 1875, p. 171; Pleske, Mém. Ac. St. Pétersb. 1888, p. 12.

*Corvus (Monedula) neglectus* Swinh. Ibis, 1861, p. 259 (Talien Bay, N. China), p. 337 (between Takoo and Peking, N. China).